AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

AMENDMENTS TO THE CLAIMS

1-8. (Cancelled)

9. (Currently Amended) A method of welding together two work-pieces, the method including the following steps:

providing two metal work-pieces,

friction stir welding a region of each work-piece, wherein the region extends only part way into the work-piece,

preparing the friction stir welded regions of each work-piece to produce a surface on one work-piece that can be fusion welded to a corresponding surface on the other work-piece,

aligning the friction stir welded regions of the respective pieces so that a friction stir welded region abuts another friction stir welded region,and

fusion welding the respective prepared surfaces of the two work-pieces together[[,]] such that a fusion welded region of the work-pieces that melts during the fusion welding process is at least partially encompassed within the friction stir welded regions of the work-pieces, the fusion welding process thereby joining the work-pieces.

10. (Currently Amended) A method of welding together two metal work-pieces, the method including the following steps:

providing two metal work-pieces,

preparing a portion of each work-piece, the preparation including friction stir welding a region of each work-piece resulting in ~~performing a surface treatment that results in~~ a friction stir welded region extending from the exterior surface only part way into the work-piece having a grain structure that is finer than the grain structure of the work-piece outside that region, and

welding together the work-pieces by means of a fusion welding process that joins the respective prepared portions of the two work-pieces, wherein [[said]] the friction stir welded region of each work-piece extends into the work-piece to a depth that exceeds the depth of material that is caused to melt during the fusion welding process such that a fusion welded region of the work-pieces that melts during the fusion welding process is at least partially encompassed within the friction stir welded regions of the work-pieces.

11. (Cancelled)

12. (Original) A method according to claim 9, wherein the work-pieces, when joined, form at least part of a block of metal, the method further including the step of manufacturing an aircraft component, wherein the aircraft component is machined from the block of metal.

13. (Original) A method according to claim 10, wherein the work-pieces, when welded together, form at least part of a block of metal, the method further including the step of

manufacturing an aircraft component, wherein the aircraft component is machined from the block of metal.

14. (Cancelled)

15. (Original) A method according to claim 9, wherein the method further includes a step of making an aircraft component from the work-pieces when welded together, and a step of manufacturing an aircraft including the aircraft component.

16. (Original) A method according to claim 10, wherein the method further includes a step of making an aircraft component from the work-pieces when welded together, and a step of manufacturing an aircraft including the aircraft component.

17-21. (Cancelled)

22. (Currently Amended) A method of manufacturing an aircraft component, comprising the steps of

(a) providing two or more metal work-pieces, each work-piece having a least cross-sectional dimension of 50mm or greater;

(b) friction stir welding at least one region of each of said two or more work-pieces thereby producing a friction stir welded region extending from the exterior surface of the work-piece into the work-piece by a first distance greater

than 10mm, the friction stir welded region having a grain structure that is finer than the grain structure of the work-piece outside that region,

(c) skimming the friction stir welded region of each of said two or more work-pieces to produce a substantially flat surface,

(d) arranging said two or more work-pieces so that the substantially flat surface of each of said two or more work-pieces resulting from step (c) abuts the substantially flat surface of another of said two or more work-pieces resulting from step (c),

(e) fusion welding the abutting substantially flat surfaces, thereby joining the ~~workpieces~~ work-pieces together to form a block of metal, the fusion welding causing material in the friction stir welded region of each work-piece to melt to a second distance extending into the work-piece, the second distance being less than the first distance such that a fusion welding region of the work-pieces that melts during fusion welding is encompassed within the friction stir welded regions of the work-pieces, and

(f) after step (e), machining metal away from the block of metal to form an aircraft component.

23. (Previously Presented) A method of joining two metal work-pieces, the method comprising:

providing two metal work-pieces, each work-piece presenting at least one face defining a plane;

preparing the work-pieces by applying a friction stir welding process on the at least one face of each work-piece, the friction stir welding process defining a [[treated]] friction stir welded region extending a first distance into the work-piece from the plane of the at least one face, the [[treated]] friction stir welded region having a grain structure that is finer than the grain structure of the work-piece outside the [[treated]] friction stir welded region;

arranging the work-pieces so that the at least one face of one work-piece abuts the at least one face of the other work-piece at a butt joint; and then

welding the two work-pieces together at the butt joint with a fusion welding process wherein a portion of the [[treated]] friction stir welded region of each work-piece is melted, thereby defining a melted region extending into each work-piece a second distance from the plane of the at least one face of each work-piece, and wherein the first distance is greater than the second distance such that the melted region is encompassed within the friction stir welded regions of the work-pieces and so that a remaining portion of the [[treated]] friction stir welded region of each work-piece is sandwiched between the melted region and the portion of the work-piece outside the [[treated]] friction stir welded region.

24. (Previously Presented) A method according to claim 23, wherein the friction stir welding process is conducted such that the first distance is at least 10mm.

25. (Previously Presented) A method according to claim 23, wherein a least dimension of the face of each work-piece is 50mm or greater.

26. (Previously Presented) A method according to claim 23, further comprising machining the face of each work-piece after the friction stir welding process.

27. (Previously Presented) A method according to claim 23, wherein the fusion welding process is performed by means of an electron beam welding process.

28. (Previously Presented) A method according to claim 23, wherein the work-pieces are made from aluminum alloys.

29. (Previously Presented) A method according to claim 23, wherein one of the work-pieces is made from a first metal alloy, and the other of the work-pieces is made from a second metal alloy different from the first metal alloy.

30. (Previously Presented) A method according to claim 23, wherein the two work-pieces, when welded together, form at least part of a block of metal, the method further comprising machining an aircraft component from the block of metal.

31. (Previously Presented) A method according to claim 30, further comprising manufacturing an aircraft including the aircraft component.